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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,520	12/06/2005	Ben Bremauer	3255-7593US	5259
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TRASKBRITT, P.C.				
P.O. BOX 2550				
SALT LAKE CITY, UT 84110				
EXAMINER				
WILKINS III, HARRY D				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
04/16/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTOMail@traskbritt.com

Office Action Summary

Application No.

10/559,520

Applicant(s)

BREMAUER, BEN

Examiner

Harry D. Wilkins, III

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-13, 15-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5, 15 and 18 is/are rejected.
- 7) ☒ Claim(s) 2, 6, 7, 9-13, 16, 17 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/6/05, 3/9/07, 12/17/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "said orientation responsive means" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. It appears that this claim should depend from claim 2 which provides proper antecedent basis for this term.

3. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites the limitation "said tilt switch" in line 1. There is insufficient antecedent basis for this limitation in the claim. It appears that this claim should depend from claim 3 which provides proper antecedent basis for this term.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dos Santos Lisboa (EP 0650930).

See figures, esp. figures 1, 2, 5 and 7.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dos Santos Lisboa (EP 0650930).

Regarding claim 18, it would have been obvious to one of ordinary skill in the art to have added a device to detect the absence of water flow through the electrolytic cell of Gale et al to turn off the current to prevent any build up of hydrogen gas within the cell caused by the lack of water flow. Such is demonstrated as being within the knowledge of one of ordinary skill in the art by Dos Santos Lisboa in the paragraph spanning cols. 1 and 2.

9. Claims 1, 5, 15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale et al (US 4,036,726) in view of Kelada (US 6,080,313) with evidence from Dos Santos Lisboa (EP 0650930) for claim 18 only..

Gale et al teach (see figures, esp. figures 5 and 6) an electrically powered apparatus for generating a solute to sanitize a body of water including an electrolytic cell, arranged generally vertically, comprising a water inlet and a water outlet and a defined space surrounding the electrodes of the cell.

Thus, Gale et al fail to teach that the water inlet and water outlet were located at the lower end of the cell whereby no water could permanently collect above the base of the electrodes.

Kelada teaches (see abstract and figures, esp. figure 4) a water purification device arranged with several water purification stations, each station connected to the system by means of concentric inlet and outlet to permit water into and out of each treatment station, but such that no water can permanently collect above the base of the station.

Therefore, it would have been obvious to one of ordinary skill in the art to have adapted the electrolytic cell of Gale et al for use within the water purification device of Kelada by placing the inlet and outlet of the electrolytic cell at the bottom of the cell to connect to the flowboard of Kelada to permit the electrolytic treatment of water in the device of Kelada. The electrolytic cell would have been arranged to permit water to flow up between the electrode plates in a manner identical to that in Gale et al and then

around the outside of the electrode plates in a manner similar to that shown in Kelada for return to the outlet.

Regarding the claim feature that the electrolytic cell is operable only in a substantially vertical orientation and through a range of angles either side of the vertical up to 45 degrees, the claim feature adds no further structure to the claim, and thus is treated as being related to the manner of operation of the claimed structure. See MPEP 2114. Unless Applicant can demonstrate some structural difference requirement to meet this claim feature, it will not be given further patentable weight.

Further, the structure of Gale et al modified by Kelada would have met the requirement that in the event that water flow through the apparatus ceased, and the electric current was not shut off, that the hydrogen gas produced at the electrodes would have accumulated as claimed until the water was drained from the space surrounding the electrodes and further hydrogen production would have ceased.

Regarding claim 5, the area of the flowboard of Kelada that would have joined to the inlet and outlet of the station corresponds to the lower chamber.

Regarding claim 15, Gale et al teach the use of bi-polar electrodes.

Regarding claim 18, it would have been obvious to one of ordinary skill in the art to have added a device to detect the absence of water flow through the electrolytic cell of Gale et al to turn off the current to prevent any build up of hydrogen gas within the cell caused by the lack of water flow. Such is demonstrated as being within the knowledge of one of ordinary skill in the art by Dos Santos Lisboa in the paragraph spanning cols. 1 and 2.

Allowable Subject Matter

10. Claims 2, 6, 7, 9-13, 16, 17 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
11. Claims 3 and 4 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to properly depend from claim 2.
12. The following is a statement of reasons for the indication of allowable subject matter:
 - a. Claim 2 - The prior art fails to teach or suggest the need for a orientation sensor to detect the vertical orientation of the electrolytic cell and to end its operation if the cell is outside of a predetermined range from vertical.
 - b. Claim 6 - Although bi-directional check valves are known in the prior art, there is no teaching or suggestion in the prior art to add one to the system of Gale et al and Kelada. In fact these two references appear to teach away from doing so by showing all of the water to be disinfected flowing through the system passing through each station in series, i.e.- no water should bypass any station as it would result in non-purified water reaching the outlet.
 - c. Claim 20 - The prior art fails to teach or suggest placing an insulator and flow regulator as claimed when the device contains fewer electrodes than that which would fill the defined space. In fact the prior art appears to desire as much

open flow as possible past the electrodes to prevent clogging issues. This teaches away from restricting flow by narrowing the flow path as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry D. Wilkins, III whose telephone number is 571-272-1251. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harry D Wilkins, III/
Primary Examiner, Art Unit 1795

hdw